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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/930,447	08/16/2001	Sang Ho Lee	P-212	1301

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EXAMINER

CHARIOUI, MOHAMED

ART UNIT

PAPER NUMBER

2857

DATE MAILED: 07/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application N.	Applicant(s)
	09/930,447	LEE ET AL.
	Examiner Mohamed Charioui	Art Unit 2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

**THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become **ABANDONED** (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 16 August 2001 .

2a)  This action is **FINAL**.                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 1-26 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-26 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 16 August 2001 is/are: a)  accepted or b)  objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.

12)  The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All b)  Some \* c)  None of:

1.  Certified copies of the priority documents have been received.

2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_.

3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a)  The translation of the foreign language provisional application has been received.

15)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1)  Notice of References Cited (PTO-892) 4)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948) 5)  Notice of Informal Patent Application (PTO-152)  
3)  Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_. 6)  Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Objections***

1. **Claims 1-7** are objected to because of the following informalities:

In page 12, line 3, change "a certain timer time interval" to –a predetermined timer time interval--.

In page 12, line 7, change "the certain timer time" to –the predetermined timer time--.

Appropriate correction is required.

**Claim 1** is objected to because of the following informalities:

Claim 1 recites the limitation "adding the values" in page 12, lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the grand total" in page 12, line 4. There is insufficient antecedent basis for this limitation in the claim.

Appropriate correction is required.

**Claim 3** is objected to because of the following informalities:

In page 12, lines 15-16, change "the adding process further comprises reading *the all threads* excluding the system thread sequentially after reading the system thread." to – the adding process further comprises reading *all the threads*, excluding the system thread, sequentially after reading the system thread--.

**Claim 5** is objected to because of the following informalities: In page 13, line 5, change "the certain timer time interval" to –the predetermined timer time interval--.

Appropriate correction is required.

**Claims 8-14** are objected to because of the following informalities:

In page 13, line 16, change "a certain timer time interval" to –a predetermined timer time interval--.

In page 14, line 2, change "the certain timer time" to –the predetermined timer time--.

Appropriate correction is required.

**Claim 8** is objected to because of the following informalities:

Claim 8 recites the limitation "the read values" in page 13, line 18. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the grand total" in page 13, line 19. There is insufficient antecedent basis for this limitation in the claim.

Appropriate correction is required.

**Claim 10** is objected to because of the following informalities:

In page 14, lines 10-11, change "the adding process further comprises reading *the all threads* excluding the system thread sequentially after reading the system thread." to – the adding process further comprises reading *all the threads*, excluding the system thread, sequentially after reading the system thread--.

**Claim 11** is objected to because of the following informalities:

In page 14, lines 16-17, change "the certain timer time interval" to –the predetermined timer time interval--.

Appropriate correction is required.

**Claim 12** is objected to because of the following informalities: In page 14, line 20, change "the certain timer time interval" to –the predetermined timer time interval--.

Appropriate correction is required.

**Claim 15** is objected to because of the following informalities:

Claim 15 recites the limitation "adding the execution times" in page 15, line 11. There is insufficient antecedent basis for this limitation in the claim.

**Claim 20** is objected to because of the following informalities: In page 16, line 11, change "availabilty" to – availability--.

Appropriate correction is required.

**Claim 22** is objected to because of the following informalities: In page 16, line 16, change "wherien" to – wherein--.

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claims 2 and 3** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites in page 12, lines 10-11, "adding the execution time of the thread is performed repeatedly until there is the same value". It is unclear what same value the applicant is referring to in this limitation. Therefore, the claim is rendered indefinite.

It is also unclear what the applicant meant in claim 2 by "comparing a total of values reading threads"; therefore it is considered indefinite.

**Claim 9** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 recites in page 14, lines 5-6, "adding the execution time of the thread is performed repeatedly until there is the same value". It is unclear what same value the applicant is referring to in this limitation. Therefore, the claim is rendered indefinite.

It is also unclear what the applicant meant in claim 9 by "comparing a total of values reading threads"; therefore it is considered indefinite.

**Claim 24** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 24 recites in page 17, lines 4-5, "continually repeating steps (a)-(e)". It is unclear when the repeating of the steps is supposed to stop. Therefore, the claim is considered indefinite.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

**Claims 1-8, 10-23, 25** are rejected under 35 U.S.C. 102(a) as being anticipated by Bishop et al.

**As per claims 1-3,** Bishop et al. teach a method for measuring a quantity of usage of a CPU (see col. 3, lines 11-59); reading execution time of a thread with a certain timer time interval (see col. 6, lines 1-35) and adding the values (see col. 6, lines 12-30); subtracting a total of execution time of a former stored thread from the grand total (see col. 14, lines 42-54); and measuring a quantity of usage of a CPU by dividing the subtracted execution time of the thread by the certain timer time (see col. 9, lines 55-67).

**As per claims 15, 19, 21, and 23,** Bishop et al. teach a method for measuring CPU usage (see col. 3, lines 11-59); reading an execution time of a thread over a time interval (see col. 6, lines 1-35); adding the execution times to obtain a grand total (see col. 6, lines 12-30); reading a total execution time for a previously stored thread (see col. 6, lines 1-35); subtracting the total execution time for the previously stored thread from the grand total to obtain a result (see col. 14, lines 42-60); and outputting the result (see col. 5, lines 28-36).

**As per claims 4, 6, 7, 11, 13, 14 and 18,** Bishop et al. further teach that the quantity of usage of the CPU is compensated by finding an average value between former measured quantities of usage of a CPU and a present measured quantity of usage of a CPU when the quantity of usage of the CPU suddenly varies (see col. 3, lines 34-59).

**As per claims 5, 12 and 17,** Bishop et al. further teach that the certain time timer interval is not greater than 10 seconds (see col. 17, lines 60-66 and col. 18, lines 25-40).

**As per claim 16,** Bishop et al. further teach dividing the result by the time interval, to yield a usage percentage (see col. 9, lines 57-67).

**As per claims 20 and 25,** Bishop et al. further teach outputting the total execution time for availability to device drivers (see col. 3, lines 9-46).

**As per claim 22,** Bishop et al. further teach adding execution times continues until the grand total minus the total execution time of the previously stored system thread substantially agrees with the new system thread total execution time (see col. 6, lines 1-35).

**As per claim 26,** Bishop et al. further teach adjusting a clock pulse of the CPU in response to the grand total of execution times (see col. 13, lines 23-31 and col. 14, lines 1-34).

#### **Prior art**

4. The prior art made record and not relied upon is considered pertinent to applicant's disclosure:

**Morrison et al. ['940]** disclose method and apparatus for controlling task execution in a direct memory access controller.

**DeWitt et al. ['775]** disclose system and method for performing monitoring of resources in a data processing system in real time.

**Horvitz ['452]** discloses apparatus and methods for optimally using available computer resources for task execution during idle-time based on probabilistic assessment of future task instances.

**Lewis et al. ['714]** disclose methods, systems, and articles of manufacture for analyzing performance of application programs.

**Maytal ['095]** discloses real-time task manager for a personal computer.

**Jones et al. [061]** disclose method and system for scheduling the use of a computer system resource using a resource planner and resource provider.

**Nagae ['248]** discloses job application distributing system among a plurality of computers, job application distributing method and recording media in which job application distributing program is recorded.

**Fuller ['115]** discloses measuring direct and indirect usage of a central processing unit.

**WinTasks 4 Professional User's Manual.** shows the statistics window depicting the CPU usage and how the internal memory is used.

**Remote Task manager.** Shows the graphs of the CPU Usage History and the statistic on how the internal memory is used.

#### **Contact information**

5. Any inquiry concerning this communication from examiner should be directed to Mohamed Charioui whose telephone number is 703 605-4362. The examiner can normally be reached Monday to Friday 9 am to 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached at 703 308-1677. The fax phone number for the organization where this application is assigned is 703 305-3431.

Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose number is 703 308-0956.

Mohamed Charioui

7/16/03



MARC S. HOFF

SUPERVISORY PATENT EXAMINER  
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